

CARTRIDGE FOR CONDUCTING A CHEMICAL REACTION

ABSTRACT OF THE DISCLOSURE

A cartridge for conducting a chemical reaction includes a body having at least one flow path formed therein. The cartridge also includes a reaction vessel extending from the body for holding a reaction mixture for chemical reaction and optical detection. The vessel comprises a rigid frame defining the side walls of a reaction chamber.

The frame includes at least one channel connecting the flow path to the chamber. The vessel also includes flexible films or sheets attached to opposite sides of the rigid frame to form opposing major walls of the chamber. In addition, at least two of the side walls are optically transmissive and angularly offset from each to permit real-time optical detection of analyte in the reaction chamber.